

indicated that the phrase, "formed using the region as the substrate" in claims 1 and 9 is not understood. However, the Examiner stated that the phrase was interpreted as "formed at the first (second, third) region of the substrate."

Applicant respectfully submits that the originally filed claims are clear and in full compliance with the requirements of 35 U.S.C. §112, second paragraph. The Examiner's interpretation is acceptable to the Applicant.

The Patent Office rejected claims 1-2, 7, 9, and 10 under 35 U.S.C. 102(b) as being unpatentable over Applicant's Prior Art. With all respect to the Examiner, the rejections of claims 1-2, 7, 9, and 10 under 35 U.S.C. 102(b) are traversed.

Claims 1, 2, 7, 9 and 10 are allowable over Applicant's Prior Art in that claims 1, 2, 7, 9 and 10 recite a combination of elements, including a pixel array formed on the substrate, a driver formed on the substrate, and a control unit formed on the substrate. The cited reference does not teach or suggest at least these elements of the claimed invention. The supporting text for Figure 1C directly teaches mounting devices, such as a CPU and a controller, which were already formed on a silicon wafer by a separate semiconductor process, on a substrate, not *forming* them on the substrate. See, for example, page 4, second paragraph, and page 5, first paragraph. Likewise, the supporting text for Figure 2 directly teaches mounting devices, such as a CPU and a controller, on the substrate, not *forming* them on the substrate. See, for example, the subject specification at page 5, first and second paragraphs. Thus, Applicants respectfully submit that claims 1-2, 7, 9, and 10 are allowable under 35 U.S.C. 102(b).

The Patent Office also rejected claims 3-6, 8, and 11-18 under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art, Figures 1C and 2, in view of Funada et al.

(U.S. Patent Number 5,696,388). With all respect to the Examiner, the rejections of claims 3-6, 8, and 11-18 under 35 U.S.C. 103(a) are traversed.

Claims 3-6, 8 and 11-18 are allowable over the cited references in that those claims recite a combination of elements including a pixel array formed on the substrate, a driver formed on the substrate, and a control unit formed on the substrate. None of the cited references, singly or combined, teaches or suggests at least these elements of the claimed invention.

The Examiner states that "Funada et al. disclose in column 1, lines 17-68 that the thin film transistors (TFTs) which include the pixel array and driver are formed of amorphous silicon, single crystalline silicon, or polycrystalline silicon." Applicant respectfully submits that a "driver" is recited only once in column 1, lines 17-68. In particular, column 1, line 20 recites "TFTs as a driver for pixels." However, there the term "driver" is used to refer to a TFT, which drives a pixel. However, the drivers recited in the present specification with reference to Fig. 1B are the driver ICs that are outside of the pixel array, not the TFTs within the pixel array.

Moreover, neither Applicant's Prior Art nor Funada et al. discloses or suggests a control unit formed in a third region of the substrate, as claimed in the present invention. Accordingly, Applicant respectfully submits that claims 3-6, 8, and 11-18 are allowable over the cited references.

New claims 19-22 are allowable over the cited references in that claims 19-22 recite a combination of elements including a pixel array having an active layer including amorphous silicon, a driver having an active layer including polycrystalline or crystalline, and a control unit having an active layer including polycrystalline or crystalline. None of the cited

references, singly or combined, teach or suggest at least these elements of the claimed invention.

Therefore, Applicant believes the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 624-1285 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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